
SEMINAR ON THE CHANGING ROLE OF ELECTROCARDIOGRAPHY IN CLINICAL PRACTICE—I

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Guest Editors

Introduction

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The seminar entitled "Changing Role of Electrocardiography in Clinical Practice" includes a series of articles that will appear sequentially in the forthcoming issues of the Journal. The seminar does not intend to cover systematically the subject of electrocardiography chapter by chapter, or to become a substitute for textbooks and monographs on electrocardiology and electrophysiology. In some cases, reference will be made to the recent advances in basic and clinical electrophysiology, if they pertain to the diagnostic capabilities of the electrocardiogram. However, the overall emphasis will be on the changes in the role of the electrocardiogram, a process that is inseparable from the changing approaches to the diagnosis and treatment of heart disease during the past 10 to 15 years. These changes have created new opportunities to correlate the electrocardiogram with various anatomic, physiologic, pharmacologic, pathologic, and clinical findings. In some cases, this has contributed to enhancement, and in other cases to weakening of the role of electrocardiography in clinical decision making. Exam-

ples of enhanced diagnostic accuracy pertain to certain areas of arrhythmias and conduction disturbances as well as to localizing and sizing myocardial infarction. The contribution of electrocardiography has expanded in response to demand for ambulatory monitoring and intraoperative mapping. Other advances due to technologic progress in data processing and display, for example, computerized body surface mapping and signal-averaged low amplitude potentials, await wider clinical application. In some cases, new diagnostic techniques have become complementary to the established electrocardiographic procedures, for example, thallium imaging for the diagnosis of myocardial ischemia.

An unavoidable consequence of a successful technologic advance is the replacement of the incumbent by the newly developed superior product. In this context, electrocardiography may be forced to yield to other noninvasive methods for an accurate diagnosis of chamber enlargement. Also, an established procedure may decline when its relatively minor advantages fail to justify the greater cost or complexity, a possible explanation of an apparent decrease in the use of vectorcardiography in some clinical centers. Focusing on present changes may be helpful also in forecasting the future adaptations of clinical electrocardiography to the needs of the changing practice of cardiology.

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